# SPACE & MISSILE DEFENSE BATTLE LAB

## SAMPLE TASK 03a

1. CONTRACTOR NAME AND ADDRESS:	2. CONTRACT NO. DASG62-01-D-XXXX	
STARS CONTRACTOR	3. <b>CLIN NO.:</b> 0001-0011	
TO BE COMPETED	4. <b>TASK ORDER NO:</b> ST – 03a	
5. PROGRAM MANAGER SIGNATURE	6. TECHNICAL REPRESENTATIVE LTC Hunter Moore U.S. Army Space Command (719) 555-1234	
STARS Program Manager		
7. APPLICABLE PARAGRAPHS OF THE STAT	EMENT OF OBJECTIVES	
*8. DESCRIPTION OF WORK TO BE PERFORM	<b>IED</b> (separately identify by task(s))	
Spectral Data Processing and Support Initiatives		
*9. GOVERNMENT ESTIMATED LEVEL OF EFFORT (separately identify by task(s))		
- Not Applicable for Sample Task		
*10. <b>DELIVERIES OR PERFORMANCE REQUII</b>	REMENTS:	
Period of performance is from date of contract awar	rd through 31 December 2004.	
- See continuation pages.		
11. THIS TASK ORDER IS ISSUED PURSUANT TO THE "TASK ORDER PROCEDURES" CLAUSE OF THE CONTRACT.		
	Carol Alkhafi	
SIGNATURE OF CONTRACTING OFFICER	DATE Contracting Officer	

8.1 GENERAL INFORMATION/SCOPE: This task order is for support in the investigation, pursuit and application of spectral data and imagery initiatives.

### 8.2 SUBTASK 1 - PROGRAM MANAGEMENT AND ADMINISTRATIVE SUPPORT:

- 8.2.1 Program Management. The contractor shall manage this task order to ensure efficient, effective accomplishment of all tasks. The contractor shall develop a Task Order Plan (TOP) to accomplish the subtasks outlined in this task order. The contractor shall provide a single point of contact for all related technical and procedural matters. This Project Leader shall be cognizant of all technical elements of this contract and shall be the primary interface with Government management personnel, contract managers, and customer agency representatives and shall ensure that all required documents are properly prepared and delivered on time. Meetings shall be held at frequencies commensurate with the complexity and status of each individual subtask. Deliverables under this subtask include the TOP and revisions as required; monthly Cost and Performance Report, Quarterly Status Reports and Meeting and Conference Minutes, as required.
- 8.2.2 Administrative Support. The contractor shall provide administrative support in areas such as: word processing, scheduling, database maintenance, document preparation, development of deliverables, supporting meetings and conferences, and other related administrative and clerical activities in support of and for the duration of this task order, to include code library maintenance and system back-up file maintenance.

#### 8.3 SUBTASK 2 - SPECTRAL RESOURCE SUPPORT:

- 8.3.1 General. The contractor shall provide on-site support of remote sensing requirements. The on-site support shall consist of services to include processing of remotely sensed imagery from multispectral, panchromatic, hyperspectral, radar, and other spaceborne and airborne systems. Imagery shall be processed into usable tactical products, to include both two-dimensional and three-dimensional Space Intelligence Preparation of the Battlefield (SIPB) imagery products.
- 8.3.2 Base Production Support. The contractor shall create products obtained through the manipulation and/or fusion of DoD-owned and supplied national and commercial imagery data (e.g., Landsat, SPOT, IRS 1-C, SPIN2, IKONOS, CIB, and other digital imagery data) and supplied cartographic data (e.g., Digital Terrain Elevation Data, Digital Feature Analysis Data, Arc Digitized Raster Graphics, Digital Chart of the World, and vector data for use with ArcInfo, etc.). Data shall be manipulated in ways which result in accurate representation of militarily significant activities and/or conditions.
- 8.3.3 Spectral Initiatives Support. This effort will provide on-going capability to investigate, develop, and transition mature spectral technologies with a focus on hyperspectral capability to operational users. The contractor shall provide the capability to ingest, exploit and disseminate preliminary products built using hyperspectral data to operational users. This effort will focus on using hyperspectral data collected by the Air Force Research Laboratory (AFRL) Sindri satellite with capability to incorporate additional data from space—based hyperspectral imaging satellites, such as Warfighter-1, as they become operational.

- 8.3.3.1 Imagery Exploitation Initiatives. The contractor shall exploit technology to create products through the manipulation and fusion of DoD-owned and supplied national and commercial HSI data (e.g., HARP, AVIRIS, HYDICE, SEBASS, Sindri) and other digital imagery, GIS, and elevation data. Such exploitation may include the evaluation of data, data fusion techniques, data processing tools, exploitation tools, algorithms, and data collection parameters as directed.
- 8.3.3.2 Software Beta Test Support. The contractor may be required to evaluate HSI software tools and datasets for deficiencies. The contractor shall support beta testing of government-developed software tools or digital processing of non-standard formatted data from HSI airborne and space sensors.
- 8.3.3.3 HSI Collection Coordination. The contractor may be required to coordinate with Program Managers of hyperspectral data collection assets for access to their data and possibly their taskings.
- 8.3.3.4 Hyperspectral Architecture. The contractor may be required to design, implement and test the architecture necessary to perform hyperspectral data analysis and dissemination in support of tactical users.
- 8.3.3.5 Tactics, Techniques and Procedures (TTPs) Development. The contractor shall develop standard operating procedures and processes (TTPs) in support of TCPED (tasking, collection, processing, exploiting and disseminating) for hyperspectral data for military applications (i.e., terrain analysis, target detection/identification) for tactical users.
- 8.3.3.6 Data Collection Support. The contractor may be required to participate in HSI data collections with field site data processing, atmospheric data and sensor calibration support, operation of ground (handheld) spectroradiometers, or other activities preceding digital imagery processing operations.
- 8.3.4 Deployed/Mobile Spectral Operations Support. The contractor shall support deployed mobile spectral operations with imagery processing operators, as required. The contractor shall provide this deployed support on an as-needed basis and actively pursue alternative strategies with the Technical Monitor (TM) should such support negatively impact base support operations.
- 8.3.5 Surge Support. Normal duty hours are defined as 0730 to 1630 hours, Monday through Friday, throughout the period of performance. Additional duty time may be required by exercises and operations. Operational surge support includes the augmentation of tactical forces and deployment provide special reports, as determined by the Technical Monitor, under all subtasks without impacting the base processing capabilities required under this task.

## 8.4 SUBTASK 3 - VISUALIZATION & SPECTRAL SOFTWARE SUPPORT:

8.4.1 General. The contractor shall provide visualization and spectral software support of spectral operations initiatives. The contractor shall provide expertise in using and exploitation of cutting-edge technologies related to image processing with emphasis on hyperspectral imagery (HSI) and radar data.

- 8.4.2 Visualization Software Support. The contractor shall support the presentation of standard, tailored, fused, or prototype imagery products in COTS and GOTS visualization software, as directed. The contractor shall recommend the direction of current or future tools and to aid in the design and development of critical software modules or to design graphic user interfaces (GUI) as directed.
- 8.4.2.1 Macro-Language / Fused Product Development. The contractor may be required to use existing software macro-language tools including AML, EML, or IDL to add value to current HSI tools or develop prototype fused HSI/GIS products.
- 8.4.2.2 Tailored Applications Support. The contractor may be required to provide specific tailored applications with NT-based decision support tools.

### 8.5 SUBTASK 4- OTHER TECHNICAL SUPPORT

- 8.5.1 General. The contractor shall provide other technical support of Spectral Operations initiatives. Such support shall include providing planning and augmentation of spectral demonstrations, , providing archiving, database and web development/management support, providing system administration support, and staffing support to spectral operations or initiatives.
- 8.5.2 Planning and Demonstration Augmentation Support. As directed, the contractor shall support or augment spectral demonstrations in all aspects of planning for demonstrations, exercises, and experiments. Planning for the project shall include research, analysis, coordination, demonstration and integration of commercial and military satellite imagery and mapping products used by U.S. Army personnel in support of military operations. Planning and support may include space sensors such as, the Army Night Vision Research Lab's Hyperspectral Airborne Reconnaissance Program (HARP), National Aeronautics and Space Administration (NASA) Airborne/Visible Infrared Imaging Spectrometer (AVIRIS), DoD's Hyperspectral Digital Imagery Collection Experiment (HYDICE), Navy Littoral Airborne Sensor/Hyperspectral (LASH), Naval Earth Map Observer (NEMO), DoD Spatially Enhanced Broadband Array Spectrograph System (SEBASS), Navy Tactical Real-Time Image Processing System (TRIPS), and Air Force Sindri or Warfighter-1 satellites.
- 8.5.3 Archiving, Database and Web Development/Management Support. The contractor shall be proficient in current Microsoft Access database and be able to enter new data and find existing data. The contractor shall also manage the near-line optical library and maintain the disks used for storage of data. The contractor will make recommendations regarding the efficient cataloging and storage of the archival media to assure security, accessibility, and protection from environmental damage. The contractor shall assist in recommending improvements, integrating separate Access modules, or integrating an underpinning Relational Database Management System (RDBMS) structure. The contractor shall assist with any other database arrangements that the government may pursue, such as the sharing of metadata holdings or interoperability of records with other imagery agencies such as NIMA, EROS Data Center (EDC), or U.S. Army Topographic Engineering Center (TEC). The contractor may be required to support minor technical integration required for database support and website maintenance, and may be required to coordinate with other contractors to support, or gain technical understandings of, various technical integration efforts to include SIPRNET connectivity.

- 8.5.4 System Administration Support. The contractor shall provide system administration support to deployed and operational imagery processing systems as tasked.
- 8.6 PERSONNEL REQUIREMENTS: The contractor shall provide full-time, on-site technical personnel who meet the following minimum qualifications. Full-time personnel proposed (and accepted) shall support this effort for the life of the Task Order. Replacements shall not be made without prior coordination with the Government representative. Minimum qualifications include:
  - (1) Formal training in Image Processing Software and ESRI Arc Info or ArcView GIS software.
  - (2) Experience with processing spectral data from panchromatic and multispectral sensors in a UNIX or Windows NT environment.
  - (3) Experience in creating fused spectral data products.
  - (4) Ability to develop spectral products in support of Army Terrain Analysis and/or Intelligence Preparation of the Battlefield.
  - (5) Active duty Army tactical experience is highly desired.
  - (6) Experience in supporting military visual applications desired.
  - (7) Archiving, Database and Web Development Support. Possessing familiarization with military GIS and terrain applications, Microsoft Access Database Management experienced, and able to support basic imagery processing if required.
  - (8) System Administration Support. Support SGI and SUNSparc hardware and Ethernet backbone for local area network applications.
- 8.7 SECURITY CLEARANCES: All personnel supporting this task order shall have SECRET clearances.
- 8.8 GOVERNMENT FURNISHED EQUIPMENT: The Government will provide the necessary GFE to fulfill the requirements of this task order at the Government facility, such as office space, essential furniture, desktop computer, telephone, storage and other GFE determined necessary.
- 9.0 GOVERNMENT ESTIMATED LEVEL OF EFFORT: Not addressed in this sample task.
- 10. DELIVERABLES AND PERFORMANCE REQUIREMENTS: The following deliverable lots, address deliverables which are either changed or in addition to those set forth in Exhibit A, Contract Deliverables Requirements List set forth in the basic contract. Deliverables dates shall be set forth in the CDRL unless otherwise stated below.

CDRL	DELIVERABLE	*SUBMISSION DATA
A003	Quarterly Status Report	SMDC-AR-OP-R
A002	Performance and Cost Reports	SMDC-AR-OP-R

A001	After Action Reports & Lessons	SMDC-AR-OP-R (2 cys), 5 duty days after completion of
11001	Learned Learned	event.
A001	Related Briefings/ Information	SMDC-AR-OP-R (2 cys), Up to 23 CYS, as required. Draft
	Papers, Agendas, Miscellaneous	10-20 days after notification, Final: 10 days after receipt of
	Reports, Issue Papers	comments.
A006	Conference Minutes	SMDC-AR-OP-R (2 cys), 5 days after meeting or conference
		completion.
A007	Task Order Plan	In accordance with Section H, Paragraph H4 of the contract
		and 1 additional CY.
A004	Presentation Material	SMDC-AR-OP-R (2 cys), up to 23 CYS as required.

<sup>\*</sup>In addition to the information identified in the CDRL.